1

## SEQUENCE LISTING

```
<110> XU, ZUOSHANG
     ZAMORE, PHILIP D.
<120> ALLELE-SPECIFIC RNA INTERFERENCE
<130> UMY-038
<140> 10/700,816
<141> 2003-11-04
<150> 60/423,507
<151> 2002-11-04
<150> 60/488,283
<151> 2003-07-18
<160> 19
<170> PatentIn Ver. 3.3
<210> 1
<211> 21
<212> DNA
<213> Artificial Sequence
<223> Description of Combined DNA/RNA Molecule:
      Synthetic oligonucleotide
<223> Description of Artificial Sequence: Synthetic
      oligonucleotide
<400> 1
                                                                    21
uggagacuug cgcaaugugt t
<210> 2
<211> 21
<212> DNA
<213> Artificial Sequence
<220>
<223> Description of Combined DNA/RNA Molecule:
      Synthetic oligonucleotide
<223> Description of Artificial Sequence: Synthetic
      oligonucleotide
<400> 2
                                                                    21
cacauugcgc aagucuccat t
```

```
<210> 3
<211> 21
<212> DNA
<213> Artificial Sequence
<220>
<223> Description of Combined DNA/RNA Molecule:
      Synthetic oligonucleotide
<220>
<223> Description of Artificial Sequence: Synthetic
      oligonucleotide
<400> 3
                                                                    21
ggagacuugc gcaaugugat t
<210> 4
<211> 21
<212> DNA
<213> Artificial Sequence
<220>
<223> Description of Combined DNA/RNA Molecule:
      Synthetic oligonucleotide
<220>
<223> Description of Artificial Sequence: Synthetic
      oligonucleotide
<400> 4
                                                                    21
ucacauugcg caagucucct t
<210> 5
<211> 21
<212> DNA
<213> Artificial Sequence
<220>
<223> Description of Combined DNA/RNA Molecule:
      Synthetic oligonucleotide
<220>
<223> Description of Artificial Sequence: Synthetic
      oligonucleotide
<400> 5
                                                                    21
gagacuugcg caaugugact t
<210> 6
<211> 21
<212> DNA
<213> Artificial Sequence
```

```
<220>
<223> Description of Combined DNA/RNA Molecule:
     Synthetic oligonucleotide
<220>
<223> Description of Artificial Sequence: Synthetic
      oligonucleotide
<400> 6
                                                                   21
gucacauugc gcaagucuct t
<210> 7
<211> 48
<212> RNA
<213> Homo sapiens
gagaggcaug uuggagacuu gggcaaugug acugcugaca aagauggu
                                                                   48
<210> 8
<211> 48
<212> RNA
<213> Homo sapiens
<400> 8
                                                                   48
gagaggcaug uuggagacuu gcgcaaugug acugcugaca aagauggu
<210> 9
<211> 21
<212> DNA
<213> Artificial Sequence
<220>
<223> Description of Combined DNA/RNA Molecule:
      Synthetic oligonucleotide
<220>
<223> Description of Artificial Sequence: Synthetic
      oligonucleotide
<400> 9
                                                                    21
gagacuuggg caaugugact t
<210> 10
<211> 21
<212> DNA
<213> Artificial Sequence
<220>
<223> Description of Combined DNA/RNA Molecule:
      Synthetic oligonucleotide
```

•	<220>	
	<223> Description of Artificial Sequence: Synthetic oligonucleotide	
•	<400> 10	
	gucacauugc ccaagucuct t	21
•		
	<210> 11	
	<211> 21	
	<212> DNA	
	<213> Artificial Sequence	
	<220>	
	<223> Description of Combined DNA/RNA Molecule: Synthetic oligonucleotide	
	<220>	
	<223> Description of Artificial Sequence: Synthetic oligonucleotide	
	<400> 11	
	ggagacuugg gcaaugugat t	21
	<210> 12	
	<211> 21	
	<212> DNA	
	<213> Artificial Sequence	
	<220>	
	<223> Description of Combined DNA/RNA Molecule: Synthetic oligonucleotide	
	<220>	
	<223> Description of Artificial Sequence: Synthetic oligonucleotide	
	01130010101	
	<400> 12	21
	ucacauugee eaagueueet t	21
	<210> 13	
	<211> 21	
	<212> DNA	
	<213> Artificial Sequence	
	<220>	
	<223> Description of Combined DNA/RNA Molecule: Synthetic oligonucleotide	
	<220>	
	<223> Description of Artificial Sequence: Synthetic oligonucleotide	
	<400> 13	
	uggagacuug ggcaaugugt t	21

.

```
<210> 14
<211> 21
<212> DNA
<213> Artificial Sequence
<220>
<223> Description of Combined DNA/RNA Molecule:
      Synthetic oligonucleotide
<220>
<223> Description of Artificial Sequence: Synthetic
      oligonucleotide
<400> 14
cacauugccc aagucuccat t
                                                                   21
<210> 15
<211> 35
<212> DNA
<213> Homo sapiens
<400> 15
actgctgaca aagatggtgt ggccgatgtg tctat
                                                                   35
<210> 16
<211> 52
<212> RNA
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic
      oligonucleotide
gacaaagaug cuguggccga uaagcuuauc ggccacagca ucuuugucuu uu
                                                                   52
<210> 17
<211> 459
<212> DNA
<213> Homo sapiens
<400> 17
gcgacgaagg ccgtgtgcgt gctgaagggc gacggcccag tgcagggcat catcaatttc 60
gagcagaagg aaagtaatgg accagtgaag gtgtggggaa gcattaaagg actgactgaa 120
ggcctgcatg gattccatgt tcatgagttt ggagataata cagcaggctg taccagtgca 180
ggtcctcact ttaatcctct atccagaaaa cacggtgggc caaaggatga agagaggcat 240
gttggagact tgggcaatgt gactgctgac aaagatggtg tggccgatgt gtctattgaa 300
gattetgtga teteactete aggagaceat tgeateattg geegeacaet ggtggteeat 360
gaaaaagcag atgacttggg caaaggtgga aatgaagaaa gtacaaagac aggaaacgct 420
ggaagtcgtt tggcttgtgg tgtaattggg atcgcccaa
```

```
<210> 18
<211> 153
<212> PRT
<213> Homo sapiens
<400> 18
Ala Thr Lys Ala Val Cys Val Leu Lys Gly Asp Gly Pro Val Gln Gly
Ile Ile Asn Phe Glu Gln Lys Glu Ser Asn Gly Pro Val Lys Val Trp
Gly Ser Ile Lys Gly Leu Thr Glu Gly Leu His Gly Phe His Val His
                           40
Glu Phe Gly Asp Asn Thr Ala Gly Cys Thr Ser Ala Gly Pro His Phe
Asn Pro Leu Ser Arg Lys His Gly Gly Pro Lys Asp Glu Glu Arg His
Val Gly Asp Leu Gly Asn Val Thr Ala Asp Lys Asp Gly Val Ala Asp
Val Ser Ile Glu Asp Ser Val Ile Ser Leu Ser Gly Asp His Cys Ile
Ile Gly Arg Thr Leu Val Val His Glu Lys Ala Asp Asp Leu Gly Lys
                                              125
        115
                           120
Gly Gly Asn Glu Glu Ser Thr Lys Thr Gly Asn Ala Gly Ser Arg Leu
Ala Cys Gly Val Ile Gly Ile Ala Gln
<210> 19
<211> 2288
<212> DNA
<213> Homo sapiens
<400> 19
gtaccctgtt tacatcattt tgccattttc gcgtactgca accggcgggc cacgccgtga 60
gggagtetee ggegeaegeg geeeettgge eegeeeeagt catteeegge caetegegae 180
ccgaggctgc cgcaggggc gggctgagcg cgtgcgaggc cattggtttg gggccagagt 240
gggcgaggcg cggaggtctg gcctataaag tagtcgcgga gacggggtgc tggtttgcgt 300
cgtagtctcc tgcaggtctg gggtttccgt tgcagtcctc ggaaccagga cctcggcgtg 360
gcctagcgag ttatggcgac gaaggccgtg tgcgtgctga agggcgacgg cccagtgcag 420
ggcatcatca atttcgagca gaaggcaagg gctgggaccg ggaggcttgt gttgcgaggc 480
cgctcccgac ccgctcgtcc ccccgcgacc ctttgcatgg acgggtcgcc cgccagggct 540
```

attccatgtt catgagtttg gagataatac agcaggtggg tcataattta gcttttttt 840 cttcttctta taaataggct gtaccagtgc aggtcctcac tttaatcctc tatccagaaa 900

agagcagtta agcagcttge tggaggttca ctggctagaa agtggtcage ctgggattge 600 atggacggat ttttccacte ccaagtctgg ctgcttttta cttcactgtg aggggtaaag 660 gtaaatcage tgtttcttt gttcagaaac tctctccaac tttgcacttt tcttaaagga 720 aagtaatgga ccagtgaagg tgtggggaag cattaaagga ctgactgaag gcctgcatgg 780

```
acacggtggg ccaaaggatg aagagaggta acaagatgct taactcttgt aatcaatggc 960
gatacgtttc tggagttcat atggtatact acttgtaaat atgtgcctaa gataattccg 1020
tgtttccccc acctttgctt ttgaacttgc tgactcatgt gaaaccctgc tcccaaatgc 1080
tggaatgctt ttacttcctg ggcttaaagg aattgacaaa tgggcactta aaacgatttg 1140
gttttgtagc atttgattga atatagaact aatacaagtg ccaaagggga actaatacag 1200
gaaatgttca tgaacagtac tgtcaaccac tagcaaaatc aatcatcatt tgatgctttt 1260
catataggca tgttggagac ttgggcaatg tgactgctga caaagatggt gtggccgatg 1320
tgtctattga agattctgtg atctcactct caggagacca ttgcatcatt ggccgcacac 1380
tggtggtaag ttttcataaa ggatatgcat aaaacttctt ctaacagtac agtcatgtat 1440
ctttcacttt gattgttagt cgcgaattct aagatccaga taaactgtgt ttctgctttt 1500
aaactactaa atattagtat atctctctac taggattaat gttatttttc taatattatg 1560
aggttcttaa acatcttttg ggtattgttg ggaggaggta gtgattactt gacagcccaa 1620
agttatcttc ttaaaatttt ttacaggtcc atgaaaaagc agatgacttg ggcaaaggtg 1680
gaaatgaaga aagtacaaag acaggaaacg ctggaagtcg tttggcttgt ggtgtaattg 1740
ggatcgccca ataaacattc ccttggatgt agtctgaggc cccttaactc atctgttatc 1800
ctgctagctg tagaaatgta tcctgataaa cattaaacac tgtaatctta aaagtgtaat 1860
tgtgtgactt tttcagagtt gctttaaagt acctgtagtg agaaactgat ttatgatcac 1920
ttggaagatt tgtatagttt tataaaactc agttaaaatg tctgtttcaa tgacctgtat 1980
tttgccagac ttaaatcaca gatgggtatt aaacttgtca gaatttcttt gtcattcaag 2040
cctgtgaata aaaaccctgt atggcactta ttatgaggct attaaaagaa tccaaattca 2100
aactaaatta gctctgatac ttatttatat aaacagcttc agtggaacag atttagtaat 2160
actaacagtg atagcatttt attttgaaag tgttttgaga ccatcaaaat gcatacttta 2220
aaacagcagg tottttagot aaaactaaca caactotgot tagacaaata ggotgtoott 2280
                                                                  2288
tgaagctt
```